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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/663,956	09/19/2000	Akira Mashimo	4314	8253

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EXAMINER

PSITOS, ARISTOTELIS M

ART UNIT PAPER NUMBER

2653

DATE MAILED: 06/25/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/663,956

Applicant(s)

MASHIMO ET AL.

Examiner

Aristotelis M Psitos

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
 - If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
 - If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
 - Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 05 April 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-10 is/are pending in the application.
- 4a) Of the above claim(s) 3-5 and 8-10 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1,2,6 and 7 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date 2 & 3.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

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DETAILED ACTION

Applicants' response of 4/5/04 has been considered with the following results.

Claims 3-5,8-10 are withdrawn from consideration as being drawn to a non-elected species, election made without traverse in paper # 6 dated 4/5/06.

Claims 1-2,6 and 7 remain active in the case and have been examined.

Priority

1. Receipt is acknowledged of papers submitted under 35 U.S.C. 119(a)-(d), which papers have been placed of record in the file.

Information Disclosure Statement

The IDS(s) filed on 2/9/01 and 2/6/03 have been considered and made of record.

Specification

2. The title of the invention is not descriptive. A new title is required that is clearly indicative of the invention to which the claims are directed. Since applicants' elected species deals with particular circuit elements, the examiner recommends submitting a title in accordance with the elected and examined species. Applicants' cooperation is thanked in advanced.

Drawings

3. The drawings are objected to under 37 CFR 1.83(a). The drawings must show every feature of the invention specified in the claims. Therefore, the limitations of claims 2 and 7 must be shown or the feature(s) canceled from the claim(s). No new matter should be entered.

Corrected drawing sheets are required in reply to the Office action to avoid abandonment of the application. Any amended replacement-drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as "amended." If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show

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the renumbering of the remaining figures. The replacement sheet(s) should be labeled "Replacement Sheet" in the page header (as per 37 CFR 1.84(c)) so as not to obstruct any portion of the drawing figures. If the examiner does not accept the changes, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

Claim Rejections - 35 USC § 112

4. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

5. Claims 2 and 7 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter, which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention. The limitations recited in claims 2 & 7 find no clear support (reminder of Rule 37 CFR 1.75 (d) (1)) as filed. Further elaboration is respectfully requested.

Claim Rejections - 35 USC § 103

6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

7. The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.

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4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

8. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

9. Claims 1 and 6 are rejected under 35 U.S.C. 103(a) as being unpatentable over Horino et al or further considered with either Ando et al or JP 9-270137.

Horino et al is the US equivalent to the JP document 11-000723 (application #) stated in the submitted JP Office action (item listed on the IDS submitted on 2/6/03).

As noted therein the examiner's position was/is that the use of appropriate filter(s) for removal of the particular frequency signal would be obvious to those of ordinary skill in the art – again referring to the English translation of the submitted JP OA.

Alternatively, the cited Ando et al reference or the JP 9-270137 teach the use of LPF(s) in this environment for their inherent ability – either for subsequent motor control or restricting/eliminating unwanted signal components and hence providing for a “cleaner”/less distorted final output signal.

It would have been obvious to modify the base system of the Horino et al/JP 11-000723 document for the reasons as elaborated/recognized in the submitted JP OA and/or further elaborated upon by either of the above secondary references to either Ando et al or JP 9-270137.

10. Claims 1 and 6 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ogawa et al either considered with Ando et al/JP 9-270137.

Ogawa et al discloses a wobble signal detecting circuit, lacking the appropriate lpf ability for eliminating unwanted signal components.

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Either Ando et al/or the JP 9-270137 teach in this environment the use of lpfs for their inherent ability.

It would have been obvious to modify the base system of Ogawa et al with the teaching from either of the secondary references, motivation is as taught by either of the secondary references, i.e., subsequent motor control for the disc, or elimination of unwanted signal components.

11. Claims 1 and 6 are rejected under 35 U.S.C. 103(a) as being unpatentable over JP 09-326122 considered with Ogawa et al.

JP 09-326122 teaches in this environment the use of lpfs for the elimination of noise components.

The order of elements is not as recited, i.e., see the discussion with respect to figures 1 and 5.

Ogawa et al teaches the ability of rearranging the components so as to have the s/h prior to any subtracting ability.

It would have been obvious to modify the base system of JP 09-326122 with the above teaching from Ogawa et al, the re-arrangement of circuit components is considered merely an alternative design especially because no unexpected results are seen to occur from such rearrangement of parts.

12. Claims 2 and 7 are rejected under 35 U.S.C. 103(a) as being unpatentable over the art as applied to claims 1 and 6 as stated in paragraphs 9,10 or 11 above, and further in view of Official notice.

The limitations of these claims add additional detectors. As acknowledged in the JP OA submitted by applicant, the existence of a photodetector matrix arrangement with the additional elements is known. Hence the examiner takes Official notice thereof.

It would have been obvious to modify the base system as stated in any of the above noted paragraphs with the old and well known plural photo detector matrix arrangement, motivation is to provide for a plural photo detector matrix arrangement and derive as many detected signals as desired.

Conclusion

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Kaimoka et al – see figs. 2 and 4 and their discussion with respect to lpfs, and subtractor circuitry in this environment for signal processing. Imura - see the wobble signal detection block 40. Okada et al – see the discussion with respect to fig 1 and lpf and wobble signal detecting, Kim et al – see the discussion

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focusing upon the use of Ipfs in this environment for enhancing the signal detection/processing abilities, Masui – see the discussion with respect to figure 6, the use of Ipfs in this environment as part of the wobble signal detecting circuitry, JP 57-15516 – the teaching of Ipfs for noise eliminating in sample & hold circuitry, JP 6-187649 – see the discussion with respect to element 42 (Ipfs) for subsequent generation of control signal(s) in this environment in the wobble signal line.

Hard copies of the application files are now separated from this examining corps; hence the examiner can answer no questions that require a review of the file without sufficient lead-time.

Any inquiries concerning missing papers/references, etc. must be directed to Group 2600 Customer Services at (703) 306-0377.

Any inquiry concerning *the merits of this* communication or earlier communications from the examiner should be directed to Aristotelis M Psitos whose telephone number is (703) 308-1598. The examiner can normally be reached on M-Thursday 8 - 4.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, William R. Korzuch can be reached on (703) 305-6137. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Aristotelis M Psitos
Primary Examiner
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